* 1. naturally occurring
* inorganic
* solid
* internal structure
* chemical composition
* 2. rocks are aggregates of one or more minerals
* 3. protons and neutrons are found in the nucleus and represent practically all of an atom’s mass. Protons are positively charged, whereas neutrons are neutral. Electrons orbit the nucleus, have practically no mass, and carry a negative charge
* 4. In a neutral atom the number of protons equals the number of electrons; therefore the answer is 35.  
   The atomic number is the same as the number of protons, thus the answer is 35.  
   By subtracting the number of protons from the mass number, the number of neutrons can be determined. The number of neutrons is 45.
* 5. An ion is produced when an atom either gains or loses one or more electrons and becomes either negatively charged (if electrons are gained) or positively charged (if electrons are lost).
* 6. Isotopes of an element have varying numbers of neutrons in the nucleus and, hence different atomic weights.
* 7. Usually crystal growth is interrupted because of competition for space. The result is an intergrown mass of crystals.
* 8. Impurities often cause the same mineral to have many colors. For examples, fluorite can be purple, clear, yellow, etc., while quartz can be practically any color.
* 9. The hardness test might help you make a determination.
* 10. Since it is very hard, it is a good abrasive.
* 11. With a specific gravity of 20, gold is 20 times heavier than water. Thus, a 25 liter pail of gold would weigh 500 kg.
* 12. The two most abundant elements in the Earth’s crust (by weight) are oxygen (46.6%) and silicon (27.7%)
* 13. Feldspars are by far the most plentiful group of silicate minerals, comprising over 50% of Earth’s crust. Quartz is the second most abundance mineral in the continental crust.
* 14. Three nonsilicate minerals that are commonly found in rocks are calcite, halite, and gypsum.
* 15. Mineral reserves are identified deposits from which minerals can be extracted profitably. The concept of a mineral resource has a broader meaning. In addition to including reserves, it also includes known deposits that are not yet economically or technologically recoverable, as well as deposits that are inferred to exist but not yet discovered.
* 16. One way a mineral deposit could become profitable to extract is through an economic change: e.g. the demand for a metal may increase and cause a price increase. Also, if a technological advance allows the metal to be extracted at a lower cost, it may become profitable to extract and thus be reclassified as an ore.